

Amendments to the claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of claims:

1. (Currently Amended) A method for preparing free polyunsaturated fatty acids and their oxidation metabolites, ~~wherein, successively, comprising,~~

a) ~~the production of polyunsaturated fatty acids and of their oxidation metabolites is stimulated, in stimulating a red alga, by the action of~~ with an elicitor, which is a peptide, a lipid or a saccharide in nature, and then resulting in the production of polyunsaturated fatty acids and their oxidation metabolites,

b) extracting the polyunsaturated fatty acids produced and also the oxidation metabolites are extracted from the red alga.

2. (Currently Amended) The method ~~as claimed in~~ of claim 1, wherein the ~~stimulation of the production of the polyunsaturated fatty acids and of their oxidation metabolites is obtained, in the case of the red alga is a~~ *Chondrus crispus*, *crispus* red alga, and wherein the elicitor is a ~~by elicitation under the action of components~~ component of a green alga *Acrochaete operculata*.

3. (Currently Amended) The method ~~as claimed in~~ of claim 1 ~~claim 2~~, wherein the red alga is stimulated by elicitation is carried out by making use of an extract of the green alga ~~*Acrochaete operculata*~~, obtained by aqueous extraction, under cold conditions or under hot conditions, of the green alga ground in liquid nitrogen.

4. (Currently Amended) The method of claim 1 ~~as claimed in one of claims 1 to 3~~, wherein the extraction of the polyunsaturated fatty acids and the oxidation metabolites is carried out by aqueous extraction of the red alga ground in liquid nitrogen, followed by extraction with an organic solvent.